

ABSTRACT

[0135] The present invention is directed to a nucleic acid comprising a deletion mutant of a PTAP (SEQ ID NO:1) motif and/or PPXY (SEQ ID NO:2) and/or YXXL (SEQ ID NO:3) motif in the late or L domain of a viral protein, where the L domain mediates the budding process. Examples of such viral proteins containing L domains are the retroviral gag proteins and the matrix proteins of rhabdoviruses and filoviruses. In addition, the present invention is directed to a vector containing (a) this nucleic acid or (b) this nucleic acid and one or more nucleic acids encoding other structural and regulatory viral proteins. The present invention is further directed to vaccines containing the nucleic acid or vector for the purpose of augmenting a cellular immune response.